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Docket No. S- 99,917
In Response to Office Action dated January 13, 2006

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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1: (currently amended) A method for avoiding objects along a path programmed into a robot comprising the following steps in the order named:

- (a) establishing a field of view for an electronic imager of said robot along said path,
- (b) obtaining object location information in said field of view,
- (c) deriving a population coded control signal from said object location information by,
processing a population coded motion energy algorithm that
decomposes a video stream of said object location information into
spatial and temporal frequency components,
processing a population coded velocity algorithm that recombines
said spatial and temporal frequency components corresponding to
said object and provides a velocity output, thereby identifying how
said object is moving in said field of view,
processing a population coded rotation algorithm that determines if
said electronic imager is turning and provides a turning information
output.

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processing a population coded translation algorithm that transforms
said velocity output of said velocity algorithm into a speed signal and
calculates a distance between said object and said electronic imager
providing a strategic control vector and a tactical control vector,
processing a population coded navigation algorithm where said
strategic control vector, said tactical control vector, and said turning
information output are used to derive said population coded control
signal, and

(d) transmitting said population coded control signal to said robot,
thereby allowing said robot to avoid said object.

Claim 2: (canceled)

Claim 3: (currently amended) A method for deriving a distance from an object to an electronic imager comprising the following steps in the order named:

(a) establishing a field of view for said electronic imager,
(b) obtaining object location information in said field of view,
(c) deriving said distance from said object to said electronic imager by,
processing a population coded set of algorithms- processing a
population coded motion energy algorithm that decomposes a video
stream of said object location information into spatial and temporal
frequency components,
processing a population coded velocity algorithm that recombines
said spatial and temporal frequency components corresponding to

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said object and provides a velocity output, thereby identifying how
said object is moving in said field of view, and
processing a population coded translation algorithm that transforms
said velocity output of said velocity algorithm into a speed signal and
calculates said distance between said object and said electronic
imager.

Claim 4: (canceled)